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10/614,111	07/03/2003	Daniel Dulitz	60963-0005-US	7663

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EXAMINER

MORRISON, JAY A

ART UNIT	PAPER NUMBER
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2168

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/26/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/614,111

Applicant(s)

DULITZ ET AL.

Examiner

Jay A. Morrison

Art Unit

2168

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 November 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 12-20,37-40 and 42-58 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 12-20,37-40 and 42-58 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Remarks

1. Claims 12-20,37-40,42-58 are pending.

Continued Examination Under 37 CFR 1.114

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11/22/2006 has been entered.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 12-17,40-48 and 50-55 rejected under 35 U.S.C. 102(e) as being anticipated by Meyerzon et al. ('Meyerzon' hereinafter) (Patent Number 6,547,829).

As per claim 12, Meyerzon teaches

“A method of detecting duplicate documents in a network crawling system, comprising:” (see background and abstract)

“constructing a plurality of tables, each table corresponding to a portion of a document address space ” (builds new index based on documents, column 4, lines 43-60) “, storing information identifying documents having a same document identifier and each identified document having an associated document rank” (column 2, lines 3-16);

“receiving a newly crawled document, such document characterized by a document identifier and a document rank” (column 2, lines 3-16);

“reading information stored in the plurality of tables to identify a set of documents, if any, sharing the document identifier of the newly crawled document” (column 9, lines 18-29; note: ‘if’ denotes an optionally recited limitation and optionally recited limitations are not guaranteed to take place and are therefore not required to be taught, see MPEP § 2106 Section II(C)) “and ascertaining an original representative document for the identified set of documents if the identified set of documents is not empty” (‘if’ denotes an optionally recited limitation and optionally recited limitations are not guaranteed to take place and are therefore not required to be taught, see MPEP § 2106 Section II(C));

“updating the information stored in at least one of the tables in accordance with the document ranks of the identified set of documents and the newly crawled document” (column 2, lines 3-16);

“and determining a representative document for the newly crawled document and the identified set of documents” (column 9, lines 32-40);

“and indexing the representative document if the identified set of documents is empty or the representative document is not the original representative document” (“if” denotes an optionally recited limitation and optionally recited limitations are not guaranteed to take place and are therefore not required to be taught, see MPEP § 2106 Section II(C)).

As per claim 13, Meyerzon teaches

“information identifying the identified set of documents, including a particular document serving as the original representative document of the identified set, is stored in one or more tables” (column 9, lines 32-40).

As per claim 14, Meyerzon teaches

“comparing the document rank of the newly crawled document with that of the particular document from the identified set in accordance with a set of predefined comparison criteria; selecting the newly crawled document as the representative document if the set of predefined comparison criteria are met” (column 5, lines 20-40);

“and keeping the particular document as the representative document if the set of predefined comparison criteria is not met” (column 2, lines 32-40).

As per claim 15, Meyerzon teaches

"the set of predefined comparison criteria comprise at least two parameters, one parameter for comparison with an absolute difference of document ranks between the newly crawled and the particular document, and another parameter for comparison with a ratio of document ranks between the newly crawled document and the particular document" (column 5, lines 20-40).

As per claim 16, Meyerzon teaches

"the updating includes inserting information identifying the newly crawled document into the at least one table only when a predefined insertion condition is satisfied" (column 9, lines 32-40).

As per claim 17, Meyerzon teaches

"the predefined insertion condition is that the document rank of the newly crawled document is higher than the document rank of at least one document in the identified set of documents" (column 2, lines 32-40).

As per claim 40, Meyerzon teaches

"A computer program product for use in conjunction with a computer system, the computer program product comprising a computer readable storage medium and a computer program mechanism embedded therein, the computer program mechanism comprising:" (see abstract and background)

"constructing a plurality of data structures for storing information of documents" (builds new index based on documents, column 4, lines 43-60) ", each document characterized by a document identifier and a document rank, the information stored in the plurality of data structures include the document identifier and a document rank for each document" (URL in history table and CID in separate CID table, column 2, lines 64 through column 3, line 22);

"receiving a requesting document in association with its document identifier and document rank" (column 2, lines 3-16);

"selecting from the plurality of data structures a set of documents, if any, sharing the same document identifier as the requesting document" (column 9, lines 18-40) "and ascertaining an original representative document for the identified set of documents if the identified set of documents is not empty" ('if' denotes an optionally recited limitation and optionally recited limitations are not guaranteed to take place and are therefore not required to be taught, see MPEP § 2106 Section II(C));

"generating a new set of documents from the requesting document and the selected set of documents in accordance with their document rank" (column 2, lines 3-16);

"identifying a representative document of the new set of documents" (column 9 lines 32-40);

"and instructions for indexing the representative document if the identified set of documents is empty or the representative document is not the original representative document" ('if' denotes an optionally recited limitation and optionally recited limitations

are not guaranteed to take place and are therefore not required to be taught, see MPEP § 2106 Section II(C)).

As per claim 41, Meyerzon teaches

“the score information for each document includes a document rank metric”
(column 2, lines 3-16).

As per claim 42, Meyerzon teaches

“the plurality of data structures include a data structure for storing information of multiple sets of documents, each set of documents sharing a same document content”
(column 2, line 64 through column 3, line 22).

As per claim 43, Meyerzon teaches

“the plurality of data structures include a data structure for storing information of multiple sets of documents, each set of documents sharing a same document address”
(storage location, column 2, line 64 through column 3, line 22).

As per claim 44, Meyerzon teaches

“the document identifier is a fixed length fingerprint of document content of a document characterized by the document identifier” (content identifier, column 2, line 64 through column 3, line 22).

As per claim 45, Meyerzon teaches

"the document identifier is a fixed length fingerprint of an address of a document characterized by the document identifier" (content identifier, column 2, line 64 through column 3, line 22).

As per claim 46, Meyerzon teaches

"sorting the requesting document and the selected set of documents in accordance with a metric included in the score information of the requesting document and selected set of documents; and selecting a new set of documents, having at most a predefined number of documents from the requesting document and the selected set of documents based on the sorting result" (column 2, lines 3-16).

As per claim 47, Meyerzon teaches

"the score information for each document includes a document rank" (column 2, lines 3-16);

"comparing the document rank of the requesting document with that of a particular document from the selected set of documents in accordance with a set of predefined comparison criteria, wherein the particular document was previously determined to be the representative document for the selected set of documents" (column 5, lines 20-40);

"selecting the requesting document as the representative document for the new set of documents if the set of predefined comparison criteria are met" (column 2, lines 32-40);

"and keeping the particular document as the representative document for the new set of documents if the set of predefined comparison criteria is not met" (column 2, lines 32-40).

As per claim 48, Meyerzon teaches

"the set of predefined comparison criteria comprise at least two parameters, one parameter for comparison with an absolute difference of document rank between the requesting document and the particular document, and another parameter for comparison with a ratio of document rank between the requesting document and the particular document" (column 8, lines 39-61).

As per claims 50-55,

These claims are rejected on grounds corresponding to the arguments given above for rejected claims 12-17 and are similarly rejected.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

Art Unit: 2168

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 18-20, 37-39 and 56-58 are rejected under 35 U.S.C. 103(a) as being unpatentable over Meyerzon et al. ('Meyerzon' hereinafter) (Patent Number 6,547,829) in view of Rujan et al. ('Rujan' hereinafter) (Patent Number 6,976,207).

As per claim 18, Meyerzon teaches

"A method of detecting duplicate documents in a network crawling system, comprising:" (see abstract and background)

"constructing a plurality of tables, each table corresponding to a segment of a document address space, storing information identifying documents having a same document identifier and each identified document having an associated document rank, wherein the plurality of tables comprise N+1 tables where N is an integer greater than one, wherein the N+1 tables comprise N tables, each generated during a respective

Art Unit: 2168

phase of a set of N crawling phases, and a current table generated during a current one of the N crawling phases wherein an oldest one of the N tables was generated during a previous instance of the current crawling phase" (column 4, lines 43-60);

"receiving a newly crawled document, such document characterized by a document identifier and a document rank" (column 2, lines 3-16);

"reading information stored in the N+1 tables to identify a set of documents, if any, sharing the document identifier of the newly crawled document" (column 4, lines 43-60) "and ascertaining an original representative document for the identified set of documents if the identified set of documents is not empty" ('if' denotes an optionally recited limitation and optionally recited limitations are not guaranteed to take place and are therefore not required to be taught, see MPEP § 2106 Section II(C));

"updating the information stored in the current table in accordance with the document rankings of the identified set of documents and the newly crawled document" (column 4, line 43 through column 5, line 13);

"determining a representative document for the newly crawled document and the identified set of documents" (column 2, lines 32-40);

"indexing the representative document if the identified set of documents is empty or the representative document is not the original representative document" ('if' denotes an optionally recited limitation and optionally recited limitations are not guaranteed to take place and are therefore not required to be taught, see MPEP § 2106 Section II(C)).

"and upon completion of the current crawling phase, ... of the N tables" (column 5, lines 1-20).

Art Unit: 2168

Meyerzon does not explicitly indicate “retiring the oldest one”.

However, Rujan discloses “retiring the oldest one” (column 15, lines 20-25).

It would have been obvious to one of ordinary skill in the art to combine Meyerzon and Rujan because using the steps of “retiring the oldest one” would have given those skilled in the art the tools to create an effective information storage and retrieval system. This gives the user the advantage of keeping a limited amount of historic information.

As per claim 19, Meyerzon teaches

“the reading comprises reading from a merged table that stores information from a plurality of the N tables, and reading from the current table” (column 4, lines 43-60).

As per claim 20, Meyerzon teaches

“information identifying the identified set of documents, including the original particular document serving as a representative document of the identified set, is stored in one or more tables” (column 9 lines 32-40).

As per claims 37-39,

These claims are rejected on grounds corresponding to the arguments given above for rejected claims 18-20 and are similarly rejected.

As per claims 56-58,

These claims are rejected on grounds corresponding to the arguments given above for rejected claims 18-20 and are similarly rejected.

7. Claim 49 is rejected under 35 U.S.C. 103(a) as being unpatentable over Meyerzon et al. ('Meyerzon' hereinafter) (Patent Number 6,547,829) in view of Lambert et al. ('Lambert' hereinafter) (Publication Number 2002/0038350).

As per claim 49,

Meyerzon does not explicitly indicate "a document is a temporary redirect page comprising a document content, a source document address, and a target document address".

However, Lambert discloses "a document is a temporary redirect page comprising a document content, a source document address, and a target document address" (paragraph [0057]).

It would have been obvious to one of ordinary skill in the art to combine Meyerzon and Lambert because using the steps of "a document is a temporary redirect page comprising a document content, a source document address, and a target document address" would have given those skilled in the art the tools to accurately represent web sites and the content that they hold. This gives the user the advantage of recognizing web page structure.

Response to Arguments

8. Applicant's arguments filed 11/22/06 have been fully considered but they are not persuasive.

With regards to Applicant's argument that Meyerzon does not disclose a win that depends on the rank or score of the URL together with a hysteresis test, it is respectfully submitted that the amendments Applicant noted as being added do not in fact further limit the claim as these limitations are optionally recited and therefore do not have to take place. Therefore, Meyerzon does still teaches the claims as presented.

Conclusion

9. The prior art made of record, listed on form PTO-892, and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jay A. Morrison whose telephone number is (571) 272-7112. The examiner can normally be reached on M-F 8-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tim Vo can be reached on (571) 272-3642. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2168

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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